

1 **Amendments to the Claims:**

2 Claims 1, 2, 3 and 4 (canceled)

3 Claim 5 (new): A bi-directional optical transceiver for either transmitting a first channel  
4 having wavelength  $\lambda_1$  and simultaneously receiving a second channel having a different  
5 wavelength  $\lambda_2$ , or transmitting said second channel having wavelength  $\lambda_2$  and simultaneously  
6 receiving said first channel having wavelength  $\lambda_1$  through a single fiber optic cable comprising:

7 an optical block having a flat upper surface and a flat lower surface,

8 a reflective coating carried by said upper surface of said optical block,

9 first and second filters carried on said flat lower surface of said optical block, said  
10 filters adapted to separately filter said different wavelengths  $\lambda_1$  and  $\lambda_2$ ,

11 first and second photodetectors wherein each of said first and second photo-  
12 detectors is optically aligned with said first and second filters, respectively, to receive one of  
13 said first and second channels through one of said filters,

14 third and fourth filters carried on said flat lower surface of said optical block, said  
15 filters adapted to separately filter said wavelengths  $\lambda_1$  and  $\lambda_2$ ,

16 first and second beam splitters carried by said third and fourth filters,  
17 respectively, and

18 first and second transmitting lasers, said first transmitting laser having an output  
19 wavelength  $\lambda_1$  and second transmitting laser having an output wavelength  $\lambda_2$ , wherein each  
20 of said first and second lasers is optically aligned with one of said first and second beam  
21 splitters, and one of said third and fourth filters, respectively,

22 wherein whenever said first transmitting laser is operating at first wavelength  $\lambda_1$ ,  
23 said second transmitting laser is turned off, and said second photodetector is receiving said  
24 second channel of wavelength  $\lambda_2$  and said first photodetector is turned off, and

25 wherein whenever said second transmitting laser is operating at said second  
26 wavelength  $\lambda_2$  said first transmitting laser is turned off, and said first photodetector is receiving

1 said first channel of wavelength  $\lambda_1$  and said second photodetector is turned off.

2 Claim 6 (new): The apparatus of claim 5, further comprising means for turning on said  
3 second transmitting laser and said first photodetector when either said first transmitting laser  
4 or said second photodetector fails, thereby creating a built-in redundancy of the transceiver.

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